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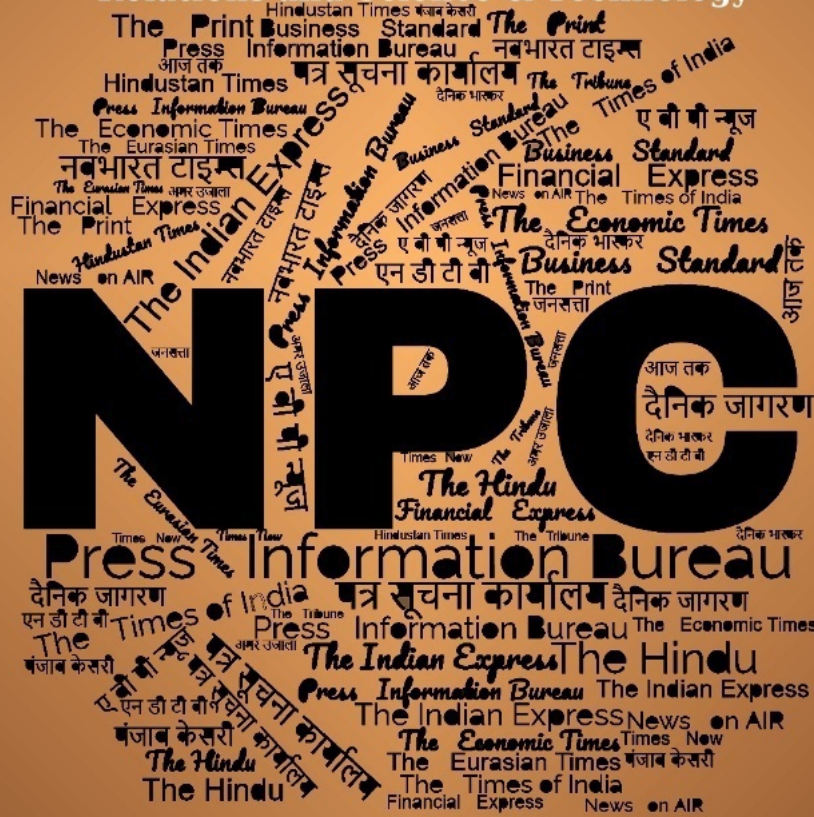
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# समाचार पत्रों से चयनित अंश Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

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# Defence News

राजनाथ ने वैश्विक संघर्षों का हवाला देते हुए ड्रोन निर्माण में आत्मनिर्भरता पर जोर दिया

Source: Jansatta, Dt. 20 Mar 2026

जनसत्ता ब्यूरो  
नई दिल्ली, 19 मार्च।

रक्षा मंत्री राजनाथ सिंह ने रूस-यूक्रेन और ईरान-इजराइल संघर्षों का जिक्र करते हुए गुरुवार को कहा कि भारत को ड्रोन निर्माण के क्षेत्र में एक मजबूत तंत्र विकसित करना चाहिए। सिंह ने राष्ट्रीय रक्षा उद्योग सम्मेलन में कहा कि इन दोनों संघर्षों ने ड्रोन और ड्रोन रोधी तकनीकों के महत्त्व को स्पष्ट रूप से दर्शाया है।

उन्होंने कहा, 'पूरी दुनिया इस समय रूस-यूक्रेन के साथ-साथ ईरान और इजराइल से जुड़े संघर्ष को देख रही है और हम स्पष्ट रूप से देख सकते हैं कि भविष्य

के युद्धों में ड्रोन और ड्रोन रोधी तकनीकों की भूमिका बेहद महत्वपूर्ण होने वाली है।

उन्होंने कहा, 'आज भारत में ऐसा ड्रोन निर्माण तंत्र विकसित करने की जरूरत है जिसमें हम पूरी तरह से आत्मनिर्भर हों।' इस सम्मेलन में देश की प्रमुख रक्षा निर्माण कंपनियों के शीर्ष अधिकारियों के साथ-साथ सार्वजनिक क्षेत्र के उपक्रमों के अधिकारी भी शामिल हुए। सिंह ने कहा, 'भारत की रक्षा तैयारी और रणनीतिक स्वायत्तता के लिए यह आवश्यक है कि भारत ड्रोन निर्माण में पूरी तरह आत्मनिर्भर बने।' रक्षा मंत्री ने कृत्रिम मेधा, रोबोटिक्स और अन्य नई एवं महत्वपूर्ण तकनीकों के बढ़ते महत्त्व पर भी प्रकाश डाला।

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**'Indegeneous drone production ecosystem must for strategic autonomy, defence preparedness': Rajnath**

Source: The Indian Express, Dt. 20 Mar 2026

Defence Minister Rajnath Singh launches the Defence India Startup Challenge (DISC-14) and ADITI challenges during the National Defence Industries Conclave (NDIC 2026), at Manekshaw Centre, in New Delhi. Chief of Defence Staff General Anil Chauhan, Chief of the Naval Staff Admiral Dinesh K Tripathi, Chief of Army Staff General Upendra Dwivedi and others are also seen. Stressing on the urgent need to build a drone-production ecosystem in the country to ensure strategic autonomy, Defence Minister Rajnath Singh on Thursday said India must work in a mission mode to emerge as a global hub of indigenous drone manufacturing over the next few years.

Speaking during the inaugural session of the two-day National Defence Industries Conclave in New Delhi, he also made a note of the ongoing Russia-Ukraine and Iran-Israel conflicts to emphasise on the need for drones and counter-drone technologies in future warfare. "Today, as the entire world is watching the ongoing conflict involving Russia and Ukraine, along with Iran-Israel, we can clearly see the extremely significant role of drones and counter-drone technologies in future warfare," he said, adding, "there is a need to build such a drone manufacturing ecosystem in India, in which we are completely self-reliant."

He said, "India must work in a mission mode to emerge as a global hub of indigenous drone manufacturing in the next few years." At the event attended by MSMEs, start-ups, Defence Public Sector Undertakings (DPSUs), private defence companies, and policymakers, Singh said, "Indigenous drone production ecosystem is a must for strategic autonomy, defence preparedness

and self-reliance.” Singh asserted that the ongoing conflicts are proof that self-reliance in drone manufacturing is essential not merely at the product level, but at the component level as well. “From the drone’s molds to its software, engines, and batteries, everything must be manufactured in India. This is no easy task. In most countries where drones are manufactured, a significant number of critical components are currently imported from China,” he said.



While he called for active contribution of the private sector in this regard, Singh extended the government’s full support to transform India into a global hub for indigenous drone manufacturing. On the role of MSMEs in the defence sector, he said, “As of February 2026, approximately 676 start-ups, MSMEs, and individual innovators have joined the defence innovation ecosystem since the inception of iDEX (Innovations for Defence Excellence) in 2018.”

As many as 548 contracts have been signed and 566 challenges launched. Of these, 58 prototypes have received clearance for procurement, valued at around Rs 3,853 crore, he added. “Furthermore, 45 procurement contracts, worth nearly Rs 2,326 crore, have already been signed. These figures demonstrate that innovation is gradually materialising into tangible products and technologies, and the role played by our start-ups and MSMEs is steadily gaining strength,” he said.

Speaking on the occasion, Secretary (Defence Production), Sanjeev Kumar highlighted that the conclave aims to promote advanced manufacturing technologies, and integration of MSMEs in the production ecosystem and entire value chain. Chief of Defence Staff General Anil Chauhan, Navy Chief Admiral Dinesh Tripathi, Chief of Army Staff General Upendra Dwivedi, Defence Secretary Rajesh Kumar Singh and DRDO Chairman Samir V Kamat were also present.

The National Defence Industries Conclave (NDIC) 2026, organised by the Department of Defence Production (DDP), is based on the theme of ‘Advanced Manufacturing Technologies’, as per the official release. Singh also inaugurated an exhibition, which saw 20 large defence companies showcasing their initiatives and programmes for co-opting MSMEs as partners, suppliers and innovators.

In addition, 24 Indian and foreign companies are participating in the exhibition to display advanced manufacturing technologies such as automation, artificial intelligence, robotics, additive

manufacturing and smart materials. The initiative aligns with the government's vision of Aatmanirbharta in defence, and seeks to enhance India's technological capability and global competitiveness in defence production. It is also expected to encourage industries from non-defence sectors to explore opportunities in defence manufacturing.

<https://indianexpress.com/article/india/global-hub-drone-manufacturing-mission-mode-rajnath-singh-10590751/>

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## **Need to move away from Chinese parts in drones: Rajnath Singh**

**Source: The Tribune, Dt. 20 Mar 2026**

Defence Minister Rajnath Singh today highlighted a major concern on the use Chinese parts in making drones and said there was an urgent need to establish a drone manufacturing ecosystem in India that renders us completely self-reliant. This self-reliance is essential not merely at the product level, but crucially at the component level as well. This implies that everything — from drone moulds to software, engines, and batteries — must be manufactured right here in India, said the minister speaking at the National Defence Industries Conclave 2026.

This, he said was no easy task. “In most countries where drones are currently manufactured, a significant number of critical components are imported from China”. For the sake of India's defence preparedness and strategic autonomy, it is imperative that the nation achieves complete self-reliance in drone manufacturing. Recent conflicts make it abundantly clear that drones and counter-drone technologies are poised to play a pivotal role in future warfare. “Indigenous drone production ecosystem must for strategic autonomy, defence preparedness and self-reliance”, he added.

He was addressing MSMEs, start-ups, winners of Innovations for Defence Excellence (iDEX), defence public sector undertakings (DPSUs), private defence companies, innovators, policymakers and academia. The event was organised by the Department of Defence Production on the theme ‘Advanced Manufacturing Technologies’.

A new initiative featuring innovation from defence public sector undertaking was also launched by the minister to encourage design-led innovation by MSMEs and start-ups. These innovations projects will be funded by DPSUs, which will also provide mentorship, testing facilities and opportunities for potential integration into their supply chains to the winning start-ups.

<https://www.tribuneindia.com/news/top-headlines/need-to-move-away-from-chinese-parts-in-drones-rajnath>

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## **Panel lauds IAF and Army for role in Operation Sindoor**

**Source: The Pioneer, Dt. 20 Mar 2026**

A parliamentary panel on defence has lauded the Indian Air Force (IAF) for its “commendable role” during Operation Sindoor, and said by executing precision strikes with advanced aerial platforms

and integrating indigenous technologies, the air force demonstrated “exceptional professionalism and operational readiness”.

In its report, presented in Parliament on Wednesday, the committee also commended the Indian Army’s “decisive role” in safeguarding national security during the decisive operation, and said it expected that “our expenditure should be in proportion to the increase in defence spending of our neighbours”. Therefore, the panel feels that the capital Budget of the Army should be sufficient to have a “deterrent capacity to ward off adversaries in case of any hostility,” the report said. The committee further said that post Operation Sindoor, emergency procurement provisions were accorded in 2025 for capital and revenue procurement to further enhance the capability for development.

“The Committee are also happy to know that emergency procurements are being utilised for acquiring drones, counter-drones, weapon systems, precision ammunition, electronic warfare and surveillance systems,” it says. The report is titled — Demands for Grants of the Ministry of Defence for the year 2026-27 on Army, Air Force, Navy, Joint Staff, Ex-Servicemen Contributory Health Scheme and Director General of Armed Forces Medical Services. The panel praised the Indian Army’s “decisive role” in safeguarding national security during Operation Sindoor last year, and emphasised the need for sustained investment in defence preparedness.

It urged that future budgets should “prioritise induction of State-of-the-art weapon systems and the development of requisite infrastructure”, so that the Army’s hallmark swiftness and coordinated response to diverse security scenarios can be maintained and further strengthened. The panel also praised the Indian Air Force for its “commendable role during Operation Sindoor. By executing precision strikes with advanced aerial platforms and integrating indigenous technologies, the Air Force demonstrated exceptional professionalism and operational readiness”.

Its swift deployment, accurate targeting, and seamless coordination with ground forces ensured the success of the mission, “significantly degrading hostile infrastructure,” it added. The Committee emphasised upon the defence ministry that such capabilities underscore the importance of continued investment in modern air power to maintain India’s strategic edge and safeguard national security. It urges the ministry to make all necessary efforts for providing adequate financial support for acquiring the latest advanced aircraft, weapons and equipment required to meet the challenges of the present geopolitical scenario so that preparedness and combat capability of the air force are “enhanced to a significant level”.

In the report, the panel also noted that with a view to fast-tracking the process of theaterisation, a dedicated team of officers from all three Services has been formed under the Chief of Integrated Staff to the Chairman Chiefs of Staff Committee (CISC). The Committee also note that three Joint Staff Officers undertake a study of global military organisations as well as organise discussions among the three Services to streamline the process of reorganisation. The Joint Staff has been able to take forward the process of theaterisation to an “advanced stage,” it said.

The Committee said it is happy to note that all three Services are working towards one common goal and enhancing their integration through pursuits in the common operational planning process, technology development, harmonising intelligence surveillance and reconnaissance resources, aggregating remotely piloted assets, joint standard operating procedures and formulation of joint military civil fusion doctrine. In a separate report, ‘Review of Sainik Schools, Rashtriya Indian Military College (RIMC) and Rashtriya Military Schools’, also presented in Parliament on Wednesday, the panel flagged that the average dropout rate during the last five years in the Sainik

Schools, Rashtriya Military School and Rashtriya Indian Military College is 6.93 per cent, 6.96 per cent and 7.1 per cent, respectively.

The Committee said it feels that the seats which fall vacant after the cadets leave these institutions midway remain vacant until the next entrance examination is held. "This has a rippling effect, as on one side, the precious resources of the Government go to waste due to idling of seats, on the other side, it curtails the opportunities of candidates who intend to join the NDA course. The Committee, therefore, urges upon the Ministry to address this dropout issue on a priority basis," it said.

The Committee also urges the ministry to reinforce its commitment and take all necessary steps in a time-bound manner for providing the requisite infrastructure, including administrative infrastructure, dormitories and related facilities for girls cadets in RIMC, which would eventually result in enhancement of their physical and mental faculties for preparation and induction into the armed forces of the nation. It also recommends that the ministry should review or revisit its existing policy, particularly relating to land criteria required for the establishment of new Sainik Schools, the first of which came up in 1961, and currently number 33 across the country.

<https://dailypioneer.com/news/panel-lauds-iaf-and-army-for-role-in-operation-sindoor>

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## **Science & Technology News**

### **PARLIAMENT QUESTION: Self reliance in CRISPR and gene editing**

*Source: Press Information Bureau, Dt. 19 Mar 2026*

To ensure regulatory approval, safety, and ethical deployment of CRISPR-based therapies in India, regulatory bodies CDSCO, ICMR, and DBT have issued the "National Guidelines for Gene Therapy Product Development and Clinical Trials, 2019", guiding stakeholders to comprehend and comply with regulatory requirements for research and development of gene therapeutic products (GTPs) in India. The Department, through various medical related programs has been steadily advancing the precision medicine ecosystem with a strong emphasis on next-generation cell and gene therapies that includes approaches to modify cells or genetic material through gene augmentation, gene editing, gene silencing, and other cell-based approaches.

The first-in-human Phase-I clinical trial for gene therapy of Hemophilia A was supported by the Department and has shown clinically significant outcomes, whereby, stable production of Factor VIII, has been observed, offering potential treatment for long-term reduction of bleeding episodes. The results of this pioneering study have been published in the prestigious New England Journal of Medicine. Efforts for further studies in human subjects are underway. The BioE3 (Biotechnology for Economy, Environment, and Employment) Policy, approved by the Union Cabinet on August 24, 2024, aims to transform India into a global biomanufacturing hub, promoting sustainable growth and reducing import reliance. Implemented by the Department of Biotechnology (DBT), it focuses on high-performance biomanufacturing for chemicals, enzymes, agriculture, and therapeutics.

This policy being implemented by DBT and BIRAC jointly is providing R&D and pilot-scale manufacturing support to biotech Startups, MSMEs through cutting edge infrastructure, public-private partnerships and institutional support by facilitating synergy between industry and research institutes. Under precision biotherapeutic vertical of the BioE3 policy, academia projects recommended for support includes development of gene therapies for hematological diseases such as Hemophilia A; Gene editing therapy for Thalassaemia; Proof-of-Concept of mRNA based protein replacement therapy for Hemophilia B. In the domain of CAR-T Cell therapies, academia projects are focused on development of Bi-specific CAR in Multiple Myeloma and proof-of-concept demonstration for in situ CAR-T cell reprogramming via viral vector delivery in a humanized mouse model.

DBT is also supporting a research grant at Tata Institute for Genetics and Society, Bangalore for indigenous development of mRNA-based in vivo gene-editing platform for propionic academia (a rare, inherited metabolic disorder). Under the BioE3 Policy, the मूलांकुर BioEnablers scheme has facilitated the creation of biomanufacturing hubs; offering state-of-the-art infrastructure for large-scale, compliant, and cost-effective production of clinical-grade cell and gene therapies (CGTs), and supporting the translation of laboratory innovations into clinically and commercially viable therapies. A public sector undertaking of DBT, Biotechnology Industry Research Assistance Council supports startups across biotechnology domains through structured funding, incubation support, and mentoring to facilitate technology development, scale-up, and commercialization, thereby enabling affordable and accessible biotechnology solutions, including gene-editing technologies. Some of the key programs initiated by BIARC include:

- Biotechnology Ignition Grant (BIG),
- Sustainable Entrepreneurship and Enterprise Development (SEED) Fund,
- Launching Entrepreneurial Driven Affordable Products (LEAP) Fund, and
- Public-Private Partnership (PPP)

Through BIRAC support was provided for indigenous development and clinical trial of two anti-CD19 directed autologous Chimeric Antigen Receptor T (CAR-T) cell therapy products (Qartemi& NexCAR19). These are currently commercially available and in use for treating specific blood cancers. ICMR is supporting several research projects from academia, start-ups, and industry for the indigenous development of affordable gene therapy tools, ensuring widespread access through various grant initiatives. These include the Investigator Initiated First-in-the-world-challenge grant, Small Grant, Intermediate grant, Centre for Advanced Research, and ICMR-initiated National Health Research Priority projects.

Additionally, ICMR's initiatives such as "Biomedical Innovations Patent Mitra" facilitate patent filing and technology transfer to industry, "MedTechMitra" enables regulation-compliant development, and the "Indian Clinical Trial and Education Network (INTENT)" with 85 trial sites supports regulation-compliant clinical trials. These efforts are supporting the large-scale manufacturing and commercialization of indigenous gene-editing products, ensuring affordability and widespread access. CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB) is working with Serum Institute, Pune, towards commercialisation of the gene therapy, having executed a technology transfer agreement in November 2025 for clinical translation and upscaling of the novel gene therapy developed at CSIR-IGIB.

These programs strengthen translational research, infrastructure development, and industry-academia collaboration to create a sustainable pipeline of indigenous CGTs and to ensure that

advanced gene-editing therapies are affordable and have widespread access. The regulatory frameworks governing genetic engineering, including CRISPR-based therapies, a type of gene-editing, are administered through a coordinated effort by multiple authorities in India. The frameworks in place include several guidelines and regulations that ensure the safe and ethical development of these therapies.

The Biosafety Framework established under the Rules for the Manufacture, Use/Import/Export and Storage of Hazardous Micro-organisms/Genetically Engineered Organisms or Cells, 1989 (the “Rules, 1989”), which notified under the Environment (Protection) Act, 1986 (EPA). The EPA is administered by the Ministry of Environment, Forests and Climate Change (MoEF&CC). Development of CRISPR-based therapies is conducted under strict contained-laboratory conditions. During this phase, regulatory oversight is exercised by Institutional Biosafety Committees (IBSCs), and by the Review Committee on Genetic Manipulation (RCGM). Under the Biosafety framework, the regulatory oversight of such therapies is guided by the “Regulations and Guidelines for Recombinant DNA Research and Biocontainment, 2017” and “Handbook for Institutional Biosafety Committees (IBSC), 2020”.

The gene-editing led healthcare technologies (including CRISPR-based therapies) are subject to stringent oversight by the Central Drugs Standard Control Organisation (CDSCO) under the New Drugs and Clinical Trials (NDCT) Rules, 2019 of the Drugs and Cosmetics Act, 1940. Additionally, they are governed by a framework of ethical guidelines and regulatory standards, primarily ensuring the protection of human research participants through Institutional Ethics Committees (IECs). These committees operate under the ICMR National Ethical Guidelines for Biomedical and Health Research involving Human Participants (2017) and the New Drugs and Clinical Trials Rules (2019).

Similarly, the National Guidelines for Gene Therapy Product Development and Clinical Trials (2019), released by ICMR, CDSCO & DBT, provide a framework for safe, ethical development and testing of gene therapy products. After successful clinical trials, a comprehensive dossier on quality, safety, and efficacy is submitted to CDSCO for final marketing approval. This information was given by the Minister of State (Independent charge) for the Ministry of Science and Technology & Earth Sciences Dr. Jitendra Singh in a written reply in the Rajya Sabha today.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2242411&reg=3&lang=1>

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The Tribune  
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The Hindu  
The Economic Times  
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The Times of India  
Hindustan Times  
नवभारत टाइम्स  
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